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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,358	11/03/2003	Kirk G. Scheckel	SCHECKEL1	1126

1444 7590 03/20/2006

BROWDY AND NEIMARK, P.L.L.C.  
624 NINTH STREET, NW  
SUITE 300  
WASHINGTON, DC 20001-5303

EXAMINER
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CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/698,358

Applicant(s)

SCHECKEL ET AL.

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 11-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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Applicant's election with traverse of the following species is acknowledged:

- (1) Arsenic as the contaminant species
- (2) Ruthenium oxide (RuO<sub>2</sub>) as the ruthenium species
- (3) Sand as the support material species
- (4) Water as the material purified species.

Applicant's statement that claims 1-6, 8-10, 15-17 and 22-23 read on the elected species is noted. However, since claims 15-17 depend from claim 14, which claim recites non-elected soil/sediment as the material purified species, these claims are not deemed to read on the elected material purified species (i.e. water). Also, since claim 22 depends from itself, and since claim 23 depends from claim 22, it is not entirely clear which material purified species (i.e. water of claim 1, or soil/sediment of claim 14) these claims should depend from. However, since claims 22 and 23 recite limitations that are identical to those recited in claims 9 and 10, respectively, it appears that Applicant intends for claims 22 and 23 to depend from claim 21. Therefore, these claims are also deemed to be directed to a non-elected species. Accordingly, claims 1-6 and 8-10 are deemed to read on all of the elected species; and claims 7 and 11-26 are deemed to read on non-elected species, and are therefore withdrawn from further consideration.

The traversal is on the grounds that: (1) the statutory restriction standard that the inventions be "independent and distinct" has not been met; (2) classification does not support a restriction requirement; (3) Applicant has a right to define the invention; (4) the search does not impose a serious burden; (5) Applicant has paid for examination of all claims; and (6) restriction is discretionary. This is not found persuasive because: (1) under the statute, an application may properly be restricted to one of two or more claimed inventions if they are either independent or

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distinct (see M.P.E.P. § 803); (2) the searches for the numerous species are not coextensive; (3) while Applicant has a right to define his invention, the Office may require the application to be restricted to one invention (see 35 U.S.C. § 121); (4) the additional search for the non-elected species would constitute a serious burden upon the examiner; (5) Applicant has paid for examination of one invention; and (6) the examiner has exercised his discretion to require an election of species in this application.

The election of species requirement is still deemed proper and is therefore made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ciampi et al. (U.S. Patent Application Publication No. 2002/0121482; hereinafter “Ciampi”). The reference discloses a process for removing arsenic from water with a material comprising ruthenium oxide (see ¶ 0072, line 23; and ¶ 216); and this is all that is required by claims 1-3 and 5.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciampi. The reference discloses the claimed invention with the exception of the ionic form of

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the arsenic. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat water containing anionic and/or cationic arsenic by the reference process, since both of these forms of arsenic are known to be contaminants in water, and since Ciampi broadly teaches removing arsenic from water (see ¶ 216, line 9), without specifying its ionic form.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ciampi as applied above, and further in view of Benjamin et al. (U.S. Patent No. 5,911,882; hereinafter "Benjamin"). Ciampi discloses the claimed invention with the exception of the recited support material. Benjamin teaches that it is known to coat an arsenic adsorbent material (see col. 9, line 63) on a support material such as sand (line 4 of the abstract); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the arsenic adsorbent material (see ¶ 216, line 8) of the primary reference onto a support material such as sand, as suggested by the secondary reference, in order to facilitate handling of this primary reference material.

Smith (U.S. Patent No. 6,602,421) and Witham (U.S. Patent No. 6,863,825; hereinafter "Witham") disclose that arsenic is known to be present in water in various ionic forms. See col. 3, lines 40-41 of Smith; and col. 1, lines 29-30 of Witham.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

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The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
March 16, 2006